

REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 14-23 are currently pending. Claims 1-13 have been cancelled without prejudice or disclaimer; and Claims 14-23 have been added by the present amendment. The additions to the claims are supported by the originally filed specification and do not add new matter.

The newly submitted claims are supported by the originally filed specification at least at page 12, line 9 to page 13, line 19; and originally filed Claims 1, 2, 4, 8, and 10.

In the outstanding Office Action, the Abstract was objected to as containing an informality; Claim 11 was objected to as containing an informality; Claims 12 and 13 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter; Claims 12 and 13 were rejected under 35 U.S.C. § 112, first paragraph, as not being supported by either a specific asserted utility or a well-established utility; Claims 1-3, 5-7, and 11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,697,013 to McFarland et al. (hereinafter “the ‘013 patent”) in view of U.S. Patent No. 7,024,188 to Khun-Jush et al. (hereinafter “the ‘188 patent”); and Claims 4 and 8-10 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicants gratefully acknowledge the indication that Claims 4 and 8-10 include allowable subject matter.

Regarding the objection to the Abstract, the Abstract has been amended to address the informality noted in the outstanding Office Action. Accordingly, the objection to the Abstract is believed to have been overcome.

Regarding the objection to Claim 11, it is respectfully submitted that the objection to that claim is rendered moot by the present cancellation of Claim 11.

Regarding the rejections of Claims 12 and 13 under 35 U.S.C. § 101, and 35 U.S.C. § 112, first paragraph, it is respectfully submitted that the rejections of those claims are rendered moot by the present cancellation of Claims 12 and 13.

The specification has been amended to correct minor informalities noted upon Applicants' review, and to include section headings. No new matter has been added.

Regarding the rejections of Claims 1-3, 5-7, and 11 under 35 U.S.C. § 103(a), it is respectfully submitted that the rejections of those claims are rendered moot by the present cancellation of Claims 1-3, 5-7, and 11.

New Claim 14 is directed to a method of operating a wireless network, comprising:

detecting at least one signal of an external radio source,
by a network device of said wireless network **during normal operation** of said wireless network, wherein, while detecting,
said network device does **not send data to another network device of said wireless network**; and

changing a communication channel or frequency band,
if said at least one signal overlaps with a currently used
communication channel or frequency band.

The '013 patent is directed to radar detection and dynamic frequency selection for wireless local area networks. In particular, the '013 patent discusses that in one embodiment, a radio receiver circuit 200 of an access point listens for wireless LAN data packets. Further, the '013 patent discusses that the radio receiver circuit 200 is configured to detect radar signals while waiting to receive and respond to normal LAN traffic. Upon detecting an event, the '013 patent discusses that the receiver analyzes the incoming signal to determine whether or not it is a regular WLAN packet. The '013 patent discusses that various types of unrecognized events can be detected by the receiver, which include noise fluctuations, collisions between WLAN stations or hidden nodes, co-channel interference, and other non-

LAN wireless traffic, such as cordless phone transmissions, and the like.¹ The '013 patent further discusses that the received event is analyzed with respect to periodicity, pulse characteristics, burst characteristics, and other similar parameters in a pattern-matching type of process to determine whether the event is a radar signal or not.²

However, it is respectfully submitted that the '013 patent fails to disclose detecting at least one signal of an external radio source, by a network device of said wireless network, during normal operation of said wireless network wherein, while detecting, said network device does ***not send data to another network device of said wireless network***. Rather, as discussed above, the '013 patent discloses detecting radar signals ***while waiting to receive and respond to normal WLAN traffic***.³ The '013 patent does not disclose detecting a signal of an external radio source ***during normal operation*** of the wireless network and at a time when the network device does ***not send data to another network device***.

Further, it is respectfully submitted that the '188 patent fails to remedy the deficiencies of the '013 patent, as discussed above. The '188 patent is directed to a wireless communication system with detection of foreign radiation sources. In particular, the '188 patent discusses achieving periods of time during which measurements for radar signals can be carried out by an access point in an IEEE 802.11 system. The '188 patent further discusses how the detection of radar signals is carried out during the "quiet periods" which have been achieved by means of the '188 invention.⁴

However, it is respectfully submitted that the '188 patent fails to disclose detecting at least one signal of an external radio source, by a network device of said wireless network, during normal operation of said wireless network, wherein, while detecting, said network device does ***not send data to another network device of said wireless network***. Rather, the

¹ See the '013 patent, column 4, lines 51-62.

² Id. at column 5, lines 5-10.

³ Id. at column 4, lines 53-55.

⁴ See the '188 patent, column 4, lines 36-43.

'188 patent discusses that in order to detect radar signals, it is necessary to interrupt the normal operation of the wireless network and order so-called "quiet periods."⁵ That is, the detection of radar signals in the '188 patent does not occur *during normal operation* of the wireless network. Thus, the '188 patent does not disclose detecting a signal of an external radio source *during normal operation* of the wireless network and at a time where the network device does *not send data to another network device*.

Hence, no matter how the teachings of the '013 and '188 patents are combined, the combination does not teach or suggest detecting at least one signal of an external radio source, by a network device of said wireless network, during normal operation of said wireless network, wherein, while detecting, said network device does not send data to another network device of said wireless network.

Accordingly, it is respectfully submitted that independent Claim 14 (and all associated dependent claims) patentably defines over any proper combination of the '013 and '188 patents.

New Claim 22 recites limitations analogous to the limitations recited in Claim 14. Accordingly, for reasons analogous to the reasons stated above for the patentability of Claim 14, it is respectfully submitted that independent Claim 22 patentably defines over any proper combination of the '013 and '188 patents.

New Claim 23, recites in part, a radar detector adapted to detect a presence of said radar signal, during normal operation of said wireless network, while said RF unit does not send the data signal to another network device of said wireless network.

As noted above, the '013 and '188 patents, alone or in proper combination, fail to disclose the step of detecting recited in Claim 14. Thus, the '013 and '188 patents fail to disclose the network device of Claim 23. Accordingly, for reasons analogous to the reasons

⁵ See '188 patent, column 4, lines 36-57.

stated above for the patentability of Claim 14, it is respectfully submitted that independent Claim 23 patentably defines over any proper combination of the '013 and '188 patents.

Dependent Claim 15 is directed to the method according to claim 14, wherein

said step of detecting is performed by *at least one further network device* of said wireless network, and

said further network device does not send data to another network device of said wireless network.

It is respectfully submitted that the '013 and '188 patents, alone or in proper combination, fail to disclose that *at least one further network device is detecting a radar signal*, as recited in Claim 15. For a non-limiting example, the effect of using at least two network devices for the detection of radar signals is that the reliability of detecting a radar signal is increased because more network devices are involved. Further, since more network devices are involved, it is possible to detect radar signals all of the time.⁶ Thus, an "overall radar detection" is achieved, as illustrated in Figure 4 of the present application.

Further, it is respectfully submitted that new Claims 16-21 recite limitations analogous to the limitations recited in cancelled Claims 4 and 8-10, which were previously indicated as allowable. Accordingly, based on the previous indication of allowability of Claims 4 and 8-10, it is respectfully submitted that Claims 16-21 patentably define over any proper combination of the '013 and '188 patents.

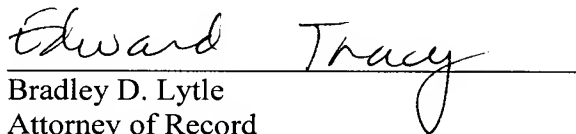
Thus, it is respectfully submitted that independent Claims 14, 22, and 23 (and all associated dependent claims) patentably define over any proper combination of the '013 and '188 patents.

⁶ See Figure 4 of the present application, illustrating that a central controller CC, wireless terminal WT1, and wireless terminal WT2 are all detecting radar signals at times when they do not send data.

Consequently, in view of the present amendment and in light of the above discussion, the outstanding grounds for rejection are believed to have been overcome. The application as amended herewith is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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